

WHAT IS CLAIMED IS:

1. A software system for managing available to promise and making promises to fulfill customer requests, the software system comprising:

5 at least one seller model representing a seller that is selling at least one product, the seller model operable to forecast for the at least one product and operable to choose commitment levels creating forecast requests;

10 the forecast requests receiving promises made by supplier sites; and

the promises available to the seller entity to promise to actual customer requests.

15 2. The software system of Claim 1, wherein the at least one seller model can comprise a hierarchy such that allocations to a seller can be used by the seller or any sub sellers and such that commitments made by a seller also commit the related sellers.

20 3. The software system of Claim 1, wherein the software system is located in and executed by a digital computer, the digital computer comprising:

a data storage device;

25 an execution memory operable to hold the software system; and

a processor coupled to the data storage device and the execution memory, the processor operable to execute the software system.

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4. A software system for managing available to promise and making promises to fulfill customer requests, the software system comprising:

a supply chain model representing a chain of supply,
5 the supply chain model comprising;

site models that represent sites having capacity and that manage material flow; and

seller models that represent sellers and that manage forecasting and purchasing;

10 wherein commitments between sites is modeled by requests and promises; and

wherein the sellers can post requests on behalf of sites in anticipation of future requests from the sites.

15 5. The software system of Claim 4, further comprising a queue that allows rejected requests to be queued for consideration whenever capacity frees up.

20 6. The software system of Claim 4, wherein the software system is located in and executed by a digital computer, the digital computer comprising:

a data storage device;

an execution memory operable to hold the software system; and

25 a processor coupled to the data storage device and the execution memory, the processor operable to execute the software system.

7. A software system for managing available to promise and making promises to fulfill customer requests, the software system comprising:

5 a product model representing a product, the product model specifying a supplier site, an item produced by that site, a minimum quantity, a minimum order lead time, a list of customers allowed to purchase, and pricing for the product;

10 wherein a customer request having desired characteristics matching the product can be fulfilled by a promise of the product;

15 such that a list of all matching products and associated available promises can be displayed as available-to-promise for the request.

8. The software system of Claim 7, wherein the product model specifies an extension allowing different forecast information to be recorded and used to compute and distribute forecast requests.

20 9. The software system of Claim 8, wherein the product model specifies expiration and adjustment semantics for forecasts as time passes and as actual customer requests arrive faster or slower than expected.

25 10. The software system of Claim 7, wherein the software system is located in and executed by a digital computer, the digital computer comprising:

a data storage device;

30 an execution memory operable to hold the software system; and

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